

[54] METHOD AND APPARATUS FOR CALCULATING POSITION AND ORIENTATION BY COMBINATION OF FEATURES OF PARTIAL SHAPES

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[57] ABSTRACT

There are disclosed a method and an apparatus for properly recognizing the position and orientation of a whole object article from its partial shape. The method comprises the steps of first extracting an image of a partial shape from a two-dimensional picture image representing at least one portion of the object article whose position and orientation are to be recognized, then calculating at least one of a center of gravity, an intersection of straight lines and a linear equation with respect to each of the extracted feature shapes, thereby obtaining at least one feature parameter, and calculating the position and orientation of the whole object article by arbitrarily combining such feature parameters.

9 Claims, 7 Drawing Sheets

